

### **REMARKS**

Claim 21 has been added herein, consistent with the Examiner's statement of reasons for allowance of claims 1, 3-8, 10, and 12-18, to introduce a claim coextensive therewith. No new matter has been added.

The present invention, as recited in pending claims 19 and 20, comprises a receiver for a wide area communication system, wherein the receiver extracts and decodes primary data packets uniquely addressed to it from a broadband signal containing primary data packets addressed to many different receivers. To reduce cost, complexity, and battery power consumption at the receiver, the communication system of the present invention extracts receiver address and start time information from the plurality of primary data packets. These addresses and start times are transmitted on a narrow band index signal. The communication system additionally transmits the primary data packets in a broadband signal.

The inventive receiver of claims 19 and 20 employs twin parallel receiver paths – one for the broadband primary data signal, which may include a buffer memory, and another for the narrow band index signal. Of these, only the index signal receiver path is continuously operative, scanning the index data stream for its address. Only when a matching address is detected in the index data stream is the second receiver path – the broadband primary data receiver – activated to extract those data packets addressed to the receiver. In this manner, the need for an expensive, complex receiver capable of real-time demodulation and inspection of the entire broadband data stream is avoided. In other words, receiver cost is managed by confining the task of continuous, real-time

monitoring to a low-bandwidth index channel. This feature of the receiver is clearly recited in claim 19:

19. A receiver for a broadband communication system comprising:  
a first signal processing means for demodulating and decoding a received narrow band index signal to extract addressing information contained in said index signal;  
a second signal processing means for demodulating and decoding a received broadband primary data signal; and  
control means for selectively activating said second signal processing means based on addressing information in said index signal.

The Examiner has rejected claim 19 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 4,829,372 to McCalley *et al.* (hereinafter, "McCalley"). The Examiner has also rejected claim 20, which adds the limitation of a buffer memory, under 35 U.S.C. § 103 as being rendered obvious by McCalley in light of official notice of an input buffer. Applicant respectfully traverses both rejections.

McCalley discloses a presentation player for extracting certain video and audio signals distributed in a CATV system, and directing them to a particular subscriber:

The function of presentation player converter 66 is to locate and tune to that frequency band within the CATV spectrum where the digital information stream is located, and to transform and monitor this information for processing and handling details as required to deliver video/audio presentations to requesting subscribers.

McCalley, col. 8, lines 57-63. In particular, the presentation player includes a fixed control channel receiver 68, and a frequency agile broadband receiver 74 (See Fig. 3). The fixed control channel receiver 68 is permanently tuned to a specific narrow-band control channel, which transmits digitally encoded control information to the presentation player. Among the control information is the frequency of a designated, high-speed input channel within the CATV spectrum. The broadband receiver 74 tunes

to this channel. McCalley describes the subsequent processing of the broadband signal:

The designated channel signal is sent by receiver 74 to a demodulator 76. Demodulator 76 converts the analog signal into a digital bit stream, performs forward correction and then sends the digital packets thereby received to receiver controller 72. At receiver controller 72 the digital packets intended for the presentation player 54 are selected and transmitted to subscriber server controller 64.

In the McCalley presentation player, the entire broadband data signal is demodulated, decoded, and scanned, and the relevant packets (*i.e.*, those with a matching subscriber identification) are extracted and directed to the subscriber. In other words, the presentation player continuously demodulates, decodes, and examines each and every data packet in the broadband data signal, looking for a match to its subscriber identification. There is no intermittent operation of the broadband receiver and associated circuits, based on the content of the narrow band control channel (the narrow band signal merely instructs the broadband receiver which broadband channel to tune to). Therefore, the McCalley receiver is not "selectively activat[ed] . . . based on addressing information in said index signal," as recited in claim 19. The presentation player thus necessarily requires the bandwidth, complexity, and power consumption inherent in the continuous receipt, processing, and examination of all data in the broadband signal.


This is precisely the situation that the present invention of claim 19 avoids. By having the address and start time information of the primary data packets removed to a narrow band index signal, the receiver of the present invention avoids the need to continuously demodulate, decode, and inspect each and every data packet in the broadband data signal, as McCalley does. Rather, the broadband receiver path of the

present invention may "sleep" until a packet addressed to the receiver is detected in the narrow band index signal, and only at that point be activated in response to that detection, to extract and decode from the broadband data the actual packet addressed to it. Since it discloses an approach including the very problems that the present invention solves, McCalley teaches away from the present invention, and neither anticipates it nor renders it obvious. Claim 20, depending from claim 19 and hence including the limitation of selective activation of the broadband receiver path, is also non-obvious in light of McCalley and the Examiner's official notice of buffer memories.

Applicant notes that claims 1, 3-8, 10, and 12-18 are allowed. New claim 21 added herein is coextensive in scope with the Examiner's stated reasons for allowance. For the reasons cited above, all claims currently pending in the instant application are patentably novel and non-obvious over the cited art. Prompt allowance of all pending claims is therefore respectfully requested.

Respectfully submitted,  
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